

**XX** PD  
PD 18-APR-1991.

**PX** PR  
**PR** 25-SEP-1990; 90MO-USO5454.  
**PP** 26-SEP-1989; 89US-0412745.  
**PR** 26-SEP-1990; 90DS-0912349.

**PA** XCEL-) T CELL SCI INC.  
**PA** (NYU ) JOHNS HOPKINS UNIVERSITY.  
**PA** (BRIG-) BRIGHAM AND WOMEN'S HOSPITAL.

**PI** Pearson DT, Klickstein LB, Wong WM, Carson GR, Hoh M, Concino MF,  
**PI** Makrides SC, Marsh HC;  
**PS** MPI, 1991-132854/18.  
**DR** P-PDB: AAR11810.

**PT** Human complement receptor type 1 gene, encoded proteins and fragments for treatment of immune disorders, myocardial infarct, damage due to inflammation and in treatment of thrombosis

**CC** Claim 1; Fig 1; 234pp; English.

**CC** This sequence is a composite of sequences isolated as lambda clones CC H10.3, T109.1, B3.1 and H7.1. The clones were present in the CC specifically primed lambda gtlI cDNA library (lambda HH) which was CC prepared with cDNA synthesised from poly(A)+ RNA from DMSO induced CC Hi-60 cells. The library was screened using probes CR1-1, CR-2 and CC CR1-4 (see Wong, W et al., 1985, Proc. Nat. Acad. Sci. USA, 82:7711)  
CC and probe CR1-18 (corresponding to nucleotides 101-352 of this CC sequence). There are four direct, long homologous repeats of 45bp, each comprising 7 short consensus repeats. Nucleotides 28-1533 are also claimed separately.  
See also AAQ11643.

**SQ** Sequence 6951 BP; 1802 A; 1681 C; 1659 G; 1809 T; 0 other:

**alignment\_scores:**

Quality:	649.50	Length:	148
Ratio:	4.883	Gaps:	2
Percent Similarity:	89.865	Percent Identity:	81.757

alignment\_block:  
US-10-031-904-8 x AAQ11642 ..

Align seg 1/1 to: AAQ11642 from: 1 to: 6951

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24 uValleuleu...LeuSerSerPheSerAsnAlcYsaasavalProglut 40	:	170 GGATTCCAAATTCGCAGGCCCTCAACAATAACTAATGAAGTGGATTGCC 219
40 rpleuProPhelaargprothrsmneuthrpsasphegiupepepo 56	:	57 lleGIThrfTyfLauasnTYvGLucysArqPrroGlVtyFergLYArqr 73
220 ATTGGACATATCTCATATGATATGCCCGCCGTATTATCCGAAGAACC 269	:	73 opheSeriileicYslenuYsasnservalTrprhnSeriallysASPL 90
90 yscylsaraylsysercyssarygsanpropokaprovolaanglvmet 106	:	270 GTTTCTATCATCTGCTCAA AAAAACTAAGTCTGGACGTGGTGCAAGACA 319
320 GGCGAGAGAGTAATCARGTGTAATCCTCCAATCTGTAATCTGTAATGSCAAG 369	:	

seq\_name: /SIPSL/gcdata/geneseq/geneseq-emb1/NA1999.DAT.AA38150

seq\_documentation\_block:

ID AA38150 standard; DNA: 6951 BP.

AC AA38150;

XX 22-FEB-2000 (first entry)

DE Human C3b/C4b receptor (CRI) protein encoding DNA.

XX C3b/C4b receptor; CRI protein; cell-surface protein; erythrocyte; human;

XX complement regulatory activity; complement pathway enzyme; tissue damage;

KM reperfusion injury; Arthus reaction; myocardial infarct; inflammation;

KM heart condition; autoimmune disorder; diagnostic; ss.

XX Homo sapiens.

OS US981481-A.

XX 09-NOV-1999.

XX 06-JUN-1995; 9505-0470652.

XX 03-APR-1989; 8905-0332865.

PR 06-DEC-1974; 7405-0350238.

PR 24-FEB-1993; 9305-0026134.

PR 01-APR-1988; 8805-0176532.

XX (UYJO ) UNIV JOHNS HOPKINS.

PA (BGHM ) BRIGHAM & WOMENS HOSPITAL.

PA (AVAN-) AVANT IMMUNOTHERAPEUTICS INC.

XX Concino MF, Wong WM, Makrides SC, Klickstein LB, Fearon DT, Ip SH;

PI Marsh HC, Carson GR;

XX WPI: 1999-633357/54.

DR P-PDB: AAY55751.

XX A human C3b/C4b receptor (CRI) protein having antinflammatory and

PT cardiant activity -

XX Disclosure; Fig 1A-P; 87pp; English.

PS The invention relates to a human C3b/C4b receptor (CRI) protein. The CRI

XX protein or fragment is expressed as a cell-surface protein on the surface

CC of a non-human cell and exhibits a complement regulatory activity of full

CC -length human CRI as expressed on erythrocytes. The CRI function in vivo

CC may be mediated through the inhibition of complement pathway enzymes. The

CC soluble CRI protein exhibits a complement regulatory activity, and this

CC may be used to prevent reperfusion injury, inhibit Arthus reaction, and

CC neutrophil mediated tissue damage, and reduce myocardial infarct size,

CC and inflammation. The CRI protein and its fragments can also be used in

CC the treatment of conditions which involve unwanted complement activity,

CC e.g. shock lung; tissue damage due to burn, or ischemic heart conditions,

CC and autoimmune disorders. CRI proteins, analogues, derivatives, and anti

CC -CRI antibodies are used in assays, and diagnostics. The present sequence

CC represents a DNA encoding the human CRI protein.

XX Sequence 6951 BP; 1802 A; 1680 C; 1661 G; 1808 T; 0 other;

## alignment\_scores:

Quality: 649.50 Length: 148  
 Ratio: 4.883 Gaps: 2  
 Percent Similarity: 89.865 Percent Identity: 81.757

## alignment\_block:

US-10-031-904-8 x AA158380 ..  
 Align seg 1/1 to: AA158380 from: 1 to: 6951

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24 uValLeuLeu...LeuSerSerPheSerAspGlnCysAsnValProGluT 40
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
120 GGTGCTGCTTGGCTGCGCGGTGCTGGGCTCAATGCAATGCCCAAGAT 169
40 rPLeuProPheAlaArgProThrAsnLeuThrAspAspPheGluPhePro 56
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
170 GGTTCATTCATTCGCGAGCTACCAACTAACTGATGATGAGTTGCTCC 219
57 lIleGlyThrTyrLeuAsnTyrGlnCysArgProGlyTyrSerGlyArgPr 73
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
220 ATTGGACATATCTGAATCATATGATGCGCCCTGTTATTCGGAGACCC 269
73 oPheSerlIleCysLeuLysAsnSerValTrpThrSerAlaLysAspL 90
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
270 GTTTCATCATCTGCTCAAAACTGAGTGCAGTGGTGTAGAGGACA 319
90 yScysLysArgLysSerCysArgAsnProProAspProValAsnGlyMet 106
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
320 GGTGCGAGACTAATCATATCTGTAATCTCCAGATCCTGTGATGAGGATG 369
107 AlaAlaValIleLysAspIleGlnPheGlySerGlnIleLysTyrSerCy 123
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
370 GTGCAGTATGATCAAGGATCCAGTCCGATCCCAATTAATATATCTTG 419
123 sProLysGlyTyrArgLeuIleGlySerSerSerAlaThrGlyIleIle 140
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
420 TACTAAAGATACCGACTGATGCTGCTGCTGCTGCTGCTGCTGCTGCT 469
140 eGcLysAnThrValIleTrpAspAsnLysThrProValCysAsp 154
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
470 CAGGTGATGATCTGATTTGATGATTAATGAACACTATTTGTCAC 513
seq_name: /SIDSL/gcgdata/geneseq/geneseqn-emb1/AA2001A.DAT:AA158380
seq_documentation_block:
10 AA158380 standard; cDNA; 7313 BP.
XX AA158380;
XX
XX
XX 32-OCT-2001 (first entry)
XX
XX Human polynucleotide SEQ ID NO 563.
XX
XX Human; nootropic; immunosuppressant; cytostatic; gene therapy; cancer;
XX peripheral nervous system; neuropathy; central nervous system; CNS;
XX Alzheimer's; Parkinson's disease; Huntington's disease; haemostatic;
XX amyotrophic lateral sclerosis; Shy-Drager Syndrome; chemotactic;
XX chemokinetic; thrombolytic; drug screening; arthritis; inflammation;
XX leukaemia; ss.
XX
XX Homo sapiens.
XX
XX OS
XX PM WO200153312-41.
XX
XX 26-JUL-2001.
XX
XX 26-DEC-2000; 2000WO-US34263.
XX

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PR 21-JAN-2000; 2000US-0488725.  
 PR 25-APR-2000; 2000US-0552317.  
 PR 09-JUL-2000; 2000US-0598042.  
 PR 19-JUL-2000; 2000US-0620312.  
 PR 03-AUG-2000; 2000US-0653450.  
 PR 14-SEP-2000; 2000US-0662191.  
 PR 19-OCT-2000; 2000US-0693036.  
 PR 29-NOV-2000; 2000US-0727344.  
 XX  
 XX (HYSE-) HXSEQ INC.  
 XX  
 XX Tang YT, Liu C, Asundi V, Chen R, Ma Y, Qian XB, Ren F, Wang D;  
 XX Wang Z, Wehrman T, Xu C, Xue AJ, Yang Y, Zhang J;  
 XX Zhao QA, Zhou P, Goodrich R, Drmanac RJ;  
 XX  
 XX WFI: 2001-44253/47.  
 XX P-NSDB: AAM39224.  
 XX  
 XX Novel nucleic acids and polypeptides, useful for treating disorders  
 XX such as central nervous system injuries -  
 XX  
 XX Claim In SEQ ID NO 583; 10078bp; English.

CC The invention relates to human nucleic acids (AA157798-AA161369) and  
 CC the encoded polypeptides (AAM38642-AA42213) with nootropic,  
 CC immunosuppressant and cytostatic activity. The polynucleotides are useful  
 CC in gene therapy. A composition containing a polypeptide or polynucleotide  
 CC of the invention may be used to treat diseases of the peripheral nervous  
 CC system, such as peripheral nervous injuries, peripheral neuropathy and  
 CC localised neuropathies and central nervous system diseases, such as  
 CC Alzheimer's, Parkinson's disease, Huntington's disease, amyotrophic  
 CC lateral sclerosis, and Shy-Drager Syndrome. Other uses include the  
 CC utilisation of the activities such as: immune system suppression,  
 CC Activin/inhibin activity, chemotactic/chemokinetic activity, haemostatic  
 CC and thrombolytic activity, cancer diagnosis and therapy, drug screening,  
 CC assays for receptor activity, arthritis and inflammation, leukaemia and  
 CC C.N.S disorders.  
 CC Note: The sequence data for this patent did not form part of the printed  
 CC specification.

XX Sequence 7313 BP; 1903 A; 1770 C; 1733 G; 1907 T; 0 other;

## alignment\_scores:

Quality: 649.50 Length: 148  
 Ratio: 4.883 Gaps: 2  
 Percent Similarity: 89.865 Percent Identity: 81.757

## alignment\_block:

US-10-031-904-8 x AA158380 ..  
 Align seg 1/1 to: AA158380 from: 1 to: 7313

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24 uValLeuLeu...LeuSerSerPheSerAspGlnCysAsnValProGluT 40
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
120 GGTGCTGCTTGGCTGCGCGGTGCTGGGCTCAATGCAATGCCCAAGAT 169
40 rPLeuProPheAlaArgProThrAsnLeuThrAspAspPheGluPhePro 56
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
170 GGTTCATTCATTCGCGAGCTACCAACTAACTGATGATGAGTTGAGTTGCC 219
57 lIleGlyThrTyrLeuAsnTyrGlnCysArgProGlyTyrSerGlyArgPr 73
   ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
220 ATTGGACATATCTGAATCATATGATGCGCCCTGTTATTCGGAGACCC 269
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 Quality: 645.50 Length: 136  
 Ratio: 5.043 Gaps: 1  
 Percent Similarity: 94.118 Percent Identity: 86.029

alignment\_block:

US-10-031-904-8 x CHPCR1WT ..

Align seg 1/1 to: CHPCR1WT from: 1 to: 6044

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 35 sasnalProgluTrpLeuProPheAlaArgProThrAsnLeuThrAsp 52  
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 56 CAATGCCCAAGATGCTTCATTTGCCAGGCCACCTAACTAATGATG 105  
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seq\_name: gb-pr:HSCLRS

seq\_documentation\_block:

LOCUS HSCR1RS 2376 bp mRNA linear PRI 22-MAR-1995  
 DEFINITION Human CRI mRNA for C3b/C4b receptor secreted form.

VERSION X14362.1 GI:30197  
 KEYWORDS alternate splicing, C3b/C4b receptor; complement receptor;

SOURCE

ORGANISM Homo sapiens  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.

REFERENCE

1 (bases 1 to 2376)  
 Hourcade, D.  
 Direct Submission  
 Submitted (29-NOV-1988) Hourcade D., Howard Hughes Medical  
 Institute, 660 S. Euclid St. Louis Mo, 63110, USA

REFERENCE

2 (bases 1 to 2376)  
 Hourcade, D., Miesner, D.R., Atkinson, J.P. and Holers, V.M.  
 Identification of an alternative polyadenylation site in the human  
 C3b/C4b receptor (complement receptor type 1) transcriptional unit  
 and prediction of a secreted form of complement receptor type 1

J. Exp. Med. 168 (4), 1255-1270 (1988)

MEDLINE 8910527

COMMENT

FEATURES

source

CDS

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/db\_xref="GI:736240"

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 HGSVYVYTRCNRPSSGGRKYPBELVGPSTYCTSDNDQNGVAVHTIDIONGRS  
 ENGLVSDNRSLFSLEVEFRQPEFAMKSPRVRKQALNKWEPELSCRVCOPEPPD  
 DVLAETTORDKRSLNEVEFRQPEFAMKSPRVRKQALNKWEPELSCRVCOPEPPD  
 DFMQOLNGRVLNOLGAKVDFDEGEPOLKSSASVCIAMESLMSVAVCOIEPCSPV  
 OIFCSPVPIPNGRHTGKPLEVFPKAVNTCDHPDRTGTELLIGESTIRCTSDQ  
 GNGWSSPAPRCGIIHCOADPHFLFAKLTQTNASPEPTGTSIKYCREYGRPS  
 ITCLDNVWSSPKDYCKRKSCKTPDPVNGVAVHTIDIONGRSNTNSCTGHRILGHS

sig\_peptide

mat\_peptide

polya\_site

BASE COUNT

ORIGIN

alignment\_scores:  
 Quality: 644.50 Length: 136  
 Ratio: 5.035 Gaps: 1  
 Percent Similarity: 94.118 Percent Identity: 86.029

alignment\_block:

US-10-031-904-8 x HSCR1RS ..

406 TTGTGAC 413